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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,108	11/21/2003	Xiao Hong Du	RAM 511	1893
25235	7590	09/20/2006	EXAMINER	
HOGAN & HARTSON LLP ONE TABOR CENTER, SUITE 1500 1200 SEVENTEENTH ST DENVER, CO 80202			JEANGLAUME, JEAN BRUNER	
			ART UNIT	PAPER NUMBER
			2819	

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/719,108	DU ET AL.	
	Examiner	Art Unit	
	Jean B. Jeanglaude	2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on amendment filed on 7-19-06.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 1-12 is/are allowed.
- 6) Claim(s) 13-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

Response To Amendments/Arguments

1. Applicant's arguments filed on July 19, 2006 have been fully considered but they are not persuasive.
2. Regarding the applicant's argument on page 7, section D, the examiner acknowledges that there is only one drawing described as prior art. However, the applicant described on page 4, lines 7 – 10 as conventional. On page 4, lines 7 – 10 it is disclosed as: "

$$n \Rightarrow \begin{cases} \text{Conventional Binary Code of } \frac{n}{2} & \text{if if } n \text{ is even} \\ \text{Conventional Binary Code of } \frac{n-1}{2} & \text{if if } n \text{ is odd} \end{cases} \quad (1)$$

[0014] For an even integer n , the encoded output is represented by the conventional binary code of $n/2$; for an odd integer n , the encoded output is represented by the conventional binary code of the one's compliment of $(n-1)/2$. "

3. If the equation is conventional as stated in page 4, lines 7 - 10, it is well known in the art or it is a prior art. Therefore, the argument is moot.
4. **Conventional = prior art**
5. For at least these reasons the rejection is maintained as follows:

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 13, 14 are rejected under 35 U.S.C. 102(a) as being anticipated by the Applicant admitted prior art. (APA).

8. Regarding claim 13, the APA discloses a method for encoding an input number n comprising if n is even, providing a conventional binary code of (n/2)[paragraph bridging pages 1 and 2; page 2, lines 25, 26; pages 4, lines 7 – 8]; and if n is odd providing a complementary binary code of (n-2)/2[paragraph bridging pages 2 and 3; page 4, lines 7, 8].

9. Claim 14 is the apparatus of claim 13. Claim 14 is rejected under the basis of claim 13.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15 - 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 15 and 18 in view of MPEP section 2106 IV.B.2. (b) define non-statutory processes because they merely manipulate an abstract idea without a claimed limitation to a practical application. The language of the claims raise a question as to whether the claims are directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under

35 U.S.C. 101. These claims appear to have algorithm in them. Moreover, a method cannot be incorporated in a claimed system. As such, claims 15, 18 would be considered statutory under 35 U.S.C. 101.

Claims 16, 17, 19, 20 - 19 are necessarily rejected as being dependent upon the rejection of claims 15 and 17 respectfully. (See:

<http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>.

Allowable Subject Matter

10. Claims 1 – 12 are allowable.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Jeanglaude whose telephone number is 571-

272-1804. The examiner can normally be reached on Monday - Friday 7:30 A. M. - 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford Barnie can be reached on 571-272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jean Bruner Jeanglaude
Primary Examiner
September 11, 2006